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ABSTRACT

A project developed computer software based upon Interstate Distributive Education Curriculum Consortium (IDECC) competency-based materials to produce a new curriculum management system for Pennsylvania secondary marketing education programs. During the project, an advisory committee composed of secondary marketing teachers, business people, and computer consultants was formed. The committee assisted in the construction of a survey instrument designed to assess the computer curriculum needs of the state's secondary marketing education teachers. The survey was mailed to the 134 teachers listed in the 1986 Pennsylvania Marketing Education Association Directory. Usable surveys were returned by 83 (63 percent) of the teachers. Data gathered in the survey supported the need for a marketing education computer curriculum management software program. The program was then developed using a menu-driven system consisting of student and competency databases. (Attachments to the report include a 17-item bibliography and 9 appendices: a list of IDECC competencies for the Pennsylvania Scope of Instruction in marketing, the survey form, correspondence, advisory committee members, advisory committee meeting agendas, memos, and a rating of 16 computer software programs.) (KC)

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ED 330 846

FINAL REPORT

MARKETING EDUCATION COMPUTER CURRICULUM

CONTRACT NUMBER 85-8060

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June 30, 1988

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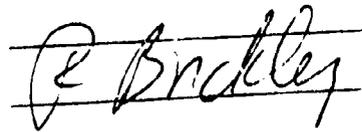
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A working committee of consultants to the project are recognized for their creative contributions which came out of Saturday meetings and the teamwork of researchers and computer programmers.

Mr. Anthony Alviani, Teacher-Coordinator, Marketing Education, New Brighton High School

Mr. Harry LeWinter, Teacher-Coordinator, Marketing Education, McKeesport Area Vocational Technical School.

Mr. Irvin Tantlinger, Teacher-Coordinator, Marketing Education, Eastern Westmoreland County Area Vocational Technical School.

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Mr. Joseph Schoppen, Computer Programmer, University of Pittsburgh, Pittsburgh, PA.

Dr. Richard Cox, Associate Professor, Psychology in Education, University of Pittsburgh.

Much appreciated for a job well done goes to Mr. Lee Miles who was a Graduate Assistant at the University of Pittsburgh and was project coordinator for this project.

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ABSTRACT

University of Pittsburgh
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Marketing Education Computer Curriculum
Contract Number 85-8060
July 1, 1987 - June 30, 1988
\$30,034.00

The purpose of the Marketing Education Computer Curriculum Project was to develop computer software based upon Interstate Distributive Education Curriculum Consortium (IDECC) competency-based materials in order to produce a new curriculum management system for Pennsylvania secondary Marketing Education Programs.

Teachers from elementary to post-secondary levels are equipping their students in the technological revolution (Donhardt, 1984) by integrating computers with curriculum. This is especially important in vocational education where occupations demand the use of computers. Marketing education, the segment of vocational education that prepares students for careers in retail, sales, and service industries (IDECC, 1987), is on the threshold of developing competency-based computer curriculum systems utilizing the Interstate Distributive Education Curriculum Consortium (IDECC).

The Marketing Education Association of Pennsylvania, at its annual meeting in 1987, stated that Pennsylvania secondary marketing teachers' efforts to utilize computers are resisted by ineffective software programs, in addition to a lack of time and expertise. Also, Marketing education

research has indicated (Stone, 1985) that secondary marketing teachers have expressed the need for assistance in developing curriculum and managing programs with the support of computers. Therefore, in response to this unmet need, the University of Pittsburgh developed user-friendly computer-based instruction, student and classroom/program management data bases.

OBJECTIVES PLANNED AND ACHIEVED

The first objective of the project was to organize an advisory committee consisting of Pennsylvania secondary marketing teachers, business people, and computer consultants. The following individuals served on the advisory committee: Mr. Anthony Alviani, New Brighton High School; Mr. Harry LeWinter, McKeesport Area Vocational Technical School (AVTS); Mr. Irvin Tantlinger, Eastern Westmoreland AVTS; Mr. Joseph Watkowski, Norwin Senior High School; Mrs. Terry Dobos, Sears, Roebuck and Company; Ms. Yvonne Williams, Kaufmann's Department Store, Pittsburgh; and Dr. John Schell, Mr. Carl Hoburg and Mr. Joseph Schoppen, University of Pittsburgh.

The second objective of the project was to construct and establish content validity of an evaluation instrument/survey designed to assess the computer curriculum needs of Pennsylvania secondary marketing education teachers. A draft copy of a survey was constructed at the University of Pittsburgh by Dr. Frank Palmieri, Dr. John W. Schell, and Mr. Lee Miles and mailed to the advisory committee to review prior to meeting as a group. A final draft of the survey was validated and approved by the advisory committee.

The third objective of the project was to mail surveys to the Pennsylvania secondary marketing education teachers listed in the most recent (1986) Pennsylvania Marketing Education Association Directory. The surveys were mailed with a postage-paid envelope in which to return the survey, and a listing of IDECC competencies with Learning Activity Packets (LAPS) number referenced with the Pennsylvania Scope of Instruction for Marketing and Distributive Education as an incentive to complete and return the survey.

The fourth objective was to tabulate the results of the survey. The data received was entered in a computer for tabulation with variables considered for data analysis. The data supports the need for a marketing education computer curriculum management software program which was the outcome of this project.

The fifth objective of the project was to develop a computer assisted classroom/program management system in response to the survey data responded by the Pennsylvania secondary marketing teachers. This computer program has been developed in portfolio and disc form utilizing a menu-driven system consisting of student and competency data bases. A supplemented disc of IDECC competencies will be available in November, 1988. Workshops will be conducted on the use of the system.

FINANCIAL SUMMARY

Project Title: Marketing Education Computer Curriculum

Length of Project: July 1, 1987 - June 30, 1988

<u>Salaries</u>	<u>Budget</u>	<u>Actual</u>
Graduate Assistant (to be named) 2 Terms	\$5,200	\$6,500
Faculty Release (2 x \$1,500)	3,000	- 0 -
Faculty Overload	- 0 -	3,258
 <u>Non-instructional Salaries/Benefits</u>		
Professional and Secretarial Staff		
Secretary (\$11,000 x 25%)	2,750	2,750
Fringe Benefits for Faculty and Secretary	1,495	1,495
Tuition Remission for Graduate Assistant (32%)	1,664	2,106
 <u>Other</u>		
Consultant and/or Release	8,000	6,000
Persons (to be named) (10 xx 8 days x 100)		
Instructional Materials and Supplies		
IDECC Materials not already on hand	250	250
Computer Software Supplies	1,500	1,500
Office Supplies and Materials	250	850
Telephone	200	100
Mailing	200	300
Printing	1,200	600
Travel (10,000 miles x .21 per mile)	2,100	2,100
	<hr/>	<hr/>
	SUB TOTAL	\$27,809
		\$27,809
 <u>Restricted Indirect Cost</u>		
Indirect Cost @ 8%	2,225	2,225
	<hr/>	<hr/>
	GRAND TOTAL	\$30,034
		\$30,034

PROJECT APPROACH/METHODOLOGY

Scope of Work

The project began with the selection of an advisory committee consisting of secondary marketing teachers, business people, and computer consultants (see Appendix 1 and 2). Its functions were to assist in the development of a survey (see Appendix 3 and 4) and to provide advice regarding the direction of the study. This committee met through the study.

A survey was developed and mailed with a postage-paid return envelope to all Pennsylvania secondary marketing education teachers in order to determine the importance of integrating computers in marketing education programs. Based upon the results of the survey, a computer assisted classroom management program was developed which incorporated requirements for Chapters Five and Six of the Pennsylvania Board of Education regulations.

This software, named PENMECCS (Pennsylvania Marketing Education Computer Curriculum System) was field tested in the marketing program at McKeesport Area Vocational Technical School (AVTS) and demonstrated and distributed at the 1988 Pennsylvania Marketing Education Association of Pennsylvania meeting.

Definition of Terms

Secondary Marketing Education: Program of study, within a Pennsylvania comprehensive high school or area vocational technical school (AVTS), designed to prepare students for careers in retailing, sales, and service occupations (IDECC, 1987).

Philosophy: Belief in meaningful and purposeful instructional methods exemplified through practical application in the classroom.

Degree of Usefulness: Numerical ranking, on a scale from one (low) to five (high), to determine if there are any benefits in using computers for competency-based curriculum development.

Computer: Electronic device consisting of a keyboard, monitor, disc drive, and printer that can store, retrieve, and process data.

Curriculum Development: Continuous updating of competency-based instructional material designed with the assistance of advisory committees in order to prepare students for employment.

Competency-Based Curriculum: Instruction designed to equip students with skills required for entry level employment or advanced study at post-secondary technical schools, colleges, or universities (Finch & Crunkilton, 1984).

Classroom/Program Management: Continuous monitoring of instructional goals and placement of students at work stations compatible with their career objectives.

Individual Responsibilities

The secondary marketing teachers serving on the advisory committee (Appendix 1) were instrumental in assisting with the development of the marketing content and classroom/programs management items of the survey. Due to his extraordinary level of expertise with computers, Mr. Harry LeWinter of McKeesport AVTS was selected by the committee to field test the software.

Representatives of business serving on the advisory committee (Appendix 1) provided advice regarding the integration of initial competencies,

necessary for students to master in order to obtain gainful employment, within a computer assisted classroom/program management system.

The computer consultants were responsible for writing a program for the finished product in addition to the writing of the manual.

Dr. Frank Palmieri, Project Director, and Mr. Lee Miles, Project Coordinator, were responsible for the development of the survey, execution of the research and tabulation of the results. Additionally, Mr. Lee Miles visited the teachers serving on the advisory committee, at their schools, in order to observe and discuss their use of software and field tested the completed programs at McKeesport AVIS.

Materials Reviewed and Previous Work Performed

Marketing education, a program that prepares secondary students for entry level sales and service occupations in business and industry, is responsible for meeting employment needs of students and employers. The use of computers is necessary to remain competitive in the work force. Secondary marketing programs, therefore, must provide practical computer skills (Russell, 1982) without duplicating computer training courses in other established programs. Recognizing the need to integrate computers in secondary marketing education curriculum, vocational education researchers and teacher educators have conducted research studies and written reports based on first hand observations of current programs concerning the development and improvement of marketing education computer curriculum.

Searle (1986) conducted a nation-wide study to determine the hardware, software, and teacher in-service needs of a secondary marketing education program. A survey was developed and sent to 42 states with secondary marketing education state advisors. These advisors were asked to randomly

select 10 secondary marketing teachers to respond to the survey. This procedure yielded a total of 420 participants, however, only 225 (54 percent) usable returns were evaluated and tabulated. The survey collected data in six categories: hardware, instructional software, operations software, teacher experience, in-service needs, and computer availability. The most used computers were Apple, IBM PC, and the Tandy TRS 80 with the Apple II being used in over half of the schools surveyed.

Instructional software included programs developed for sales, economics, entrepreneurship, management, and general principles of marketing with small groups as the most preferred method of instruction. Operations software consisted of programs that assist the teacher with program management, development of test banks, and grading.

The average teacher had 9.8 years of classroom experience with 60 percent reporting that they needed to learn how to operate computers; this, in addition to software selection was indicated as the most important in-service need. All of the teachers had access to computers, 75 percent had the hardware in their classes while the remaining 25 percent scheduled computer time with other departments in their schools.

The conclusion of the study is that secondary marketing teachers are attempting to integrate computers in the curriculum, however, they needed assistance with learning how to operate computers and selecting software. In order to accomplish this, Searle recommends that state departments of education and university teacher education programs prepare teachers more effectively. In addition, local school districts should provide the necessary equipment and facilities.

DuBois and Schubert (1986) conducted a study which revealed that inequality exists in computer access for different students within local school districts. The inequality is caused by local economic conditions and actions of administrators.

Poorer school districts have one computer for an average of 73 students while the wealthier school districts have an average of 54 students sharing a computer. The result for students in economically disadvantaged schools is that they receive fewer hours of instruction and miss opportunities for developing advanced programming skills.

Integrating computers in marketing and other vocational education programs will supplement whatever computer assisted instruction is provided in these students' academic courses.

Administrators often establish policies regarding computer usage which may treat disadvantaged students unfairly. Some students are not permitted to operate computers unless a minimum competency level is achieved. These students would benefit from remedial computer assisted instruction and the computer would function as a motivational tool. Also, students with behavior problems were not permitted to operate computers as punishment. Many of these students were found to have motivational problems which could have been resolved by making learning more interesting.

Computers were discovered to be inappropriately placed in classrooms with teachers who have no computer skills and the schools did not provide in-service training programs on their operation. Some teachers were reluctant to integrate computers with the curriculum while others refused stating that their contracts did not require them to do so.

DuBois and Schubert recommend that administration must reevaluate programs and teachers' computer literacy skills in order to place this hardware in the most effective environment and provide training for teachers in computer operation. Teachers should monitor student competency levels and learning styles, and provide, if possible, individual instruction for those with learning and behavior problems.

Administrators and teachers are aware of the need to integrate computers with curriculum; however, some teachers are utilizing them as baby sitters in which the students play video games (Young, 1987) because of the teachers' lack of operating skills. The need for in-service computer classes for teachers is once again indicated. Nevertheless, a computer-based curriculum must ultimately provide for the needs of the students and accomplish three goals: first, the curriculum must have specific educational objectives; second, it must prove what the students will learn by interacting with computers; and third, include standards by which a computer-base curriculum can be measured (Donhardt, 1984) so that future needs assessments may be achieved.

Computer-based curriculum in marketing education helps the student meet specific educational objectives by teaching content with computer assisted instruction while developing computer skills necessary to obtain employment upon graduation. Employers want to hire workers with these skills rather than spend valuable time and money (Heath, 1988) to train their recruits. Instructional software programs have been developed to simulate conditions requiring such skills in the business environment. In marketing education, the computer-based curriculum may be measured by the competency level

achieved in these software programs and by the number of students placed on jobs after graduation.

Stone (1984), recognizing the need to improve marketing education curriculum, developed a 134 item survey designed to identify the curriculum areas most needing improvement. The survey was developed by experts from secondary marketing education and business and industry, and administered at the 1984 National Marketing Education Curriculum Conference in Atlanta, Georgia.

The participants were asked to respond to each item using a five point Likert-type agreement scale, (1 = strongly disagree, 5 = strongly agree). Items were considered to be in need of improvement if they achieved a mean score of 3.5. The total number of participants was 261 with the secondary marketing teachers representing the largest group (39 percent) to respond. The following items needing improvement are listed with their respective mean scores: integrating computers in the curriculum, 4.5; computers are required for jobs, 4.3; software needs to be developed, 4.2; curriculum must be research oriented, 4.5; administrative support is needed, 4.2; periodic program evaluation is necessary, 4.5. The results indicate that each of the items exceed the minimum established mean score of 3.5 for needing improvement.

Mahan (1982) surveyed 202 secondary marketing teachers in Pennsylvania regarding the effectiveness of IDECC Learning Activity Packets (LAPS). Ten instructional uses of the LAPS were identified by the teachers and integrating computers with this curriculum tool was listed as number seven by 29 of the 161 teachers who responded to the survey. This was significant,

according to Mahan, because education was just beginning to include the use of computers in the classroom.

Heath (1982) reported to marketing teacher educators at the American Vocational Conference in St. Louis, Missouri that the most important uses of computers in secondary marketing programs include computer assisted instruction, occupational tools to help students obtain employment, and management of marketing education programs. This information, based upon data obtained from the National Center for Educational Statistics (1980), supports the development of computer curriculum systems for secondary marketing education.

Description of the Instrument

The two-page, three-part, self-report census survey exemplifies descriptive research in which data was collected from every member of the sample.

Part I, Demographics, was designed to provide background information concerning the teachers' age, sex, educational level, and years of teaching experience; location and type of school; program length; and use of the IDECC curriculum as core or secondary marketing education curriculum development and classroom/program management. The items are components of a successful program discussed in the Handbook for Teaching Marketing and Distributive Education (Pennsylvania Department of Education, 1980), and requirements outlined in Pennsylvania Department of Education, Chapter 6 guidelines, necessary for vocational education funding and program reapproval.

Part II consists of eight questions with a rating scale ranging from one (low) to five (high). The participants responded by circling the number which most accurately described their assessment of the question.

Part III, Computer Usage in Marketing Education, collected data regarding the type of computer hardware and software currently being used, as well as their instructional application. Part III consists of five questions in which the participants were requested to write the make, model, and quantity of computer hardware they have in their classrooms; write the number of hours the computer is used for classroom instruction and classroom/program management, and how many hours the computer is used for individual, small group, or large group instruction. Additionally, the participants were requested to list and evaluate software, using a scale ranging from one (low) to five (high), concerning its "user friendliness" (degree of difficulty in operating) in the secondary marketing education classroom.

Advisory Committee Meetings

Throughout the study the Advisory Committee met on a regular basis in order to insure that the project was on task. They met January 16, 1988, February 27, 1988, April 9, 1988 and May 21, 1988. Agendas of these meetings are provided in Appendix 8.

Validation Efforts

The content validation of the survey was completed by an advisory committee consisting of marketing education experts representing secondary marketing education teachers from comprehensive high schools and area vocational technical schools (AVTS), and retail business executives. In addition, computer experts were consulted to verify the technical application of computer-related questions.

All committee members were mailed a draft of the survey and were requested to approve it as written or make recommendations for improvement. They were instructed, via the telephone prior to receiving the surveys, to

review each item for practical application in marketing education and industry in accordance with the context of the problem. In addition, the computer experts were requested to review the structure and measurability of each item for programming feasibility. Each committee member was provided with a postage-paid envelope in which to return the draft with their recommendations. The committee then met as a group to develop the final draft of the survey.

Item validity, measurement representation of marketing education content, and sampling validity, representing critical components of program content, was achieved by the teachers serving on the advisory committee, utilizing the "High School Standards" in marketing education (Marketing Education Resource Center, 1987).

The teachers compared each item, and modified as necessary, with the "High School Standards" to insure that the content and critical components conformed to the standards in secondary marketing education.

Reliability, consistency of measure, was determined by randomly selecting 10 percent (13) of the population (Bartz, 1981) to complete the survey a second time (Appendix 6). These participants were selected using a random table of numbers (Bartz) and were not sent the second survey until after their first one was received in order to prevent copying the data.

PROJECT SUMMARY

Purpose/Intent

The purpose of the Marketing Education Computer Curriculum Project was to develop computer software based upon Interstate Distributive Education Curriculum Consortium (IDECC) competency-based materials in order to produce a new curriculum management system for Pennsylvania Secondary Marketing Education Programs.

Limitations

First, the data gathering phase of this project, initial response, via the survey, from the Pennsylvania secondary marketing teachers was poor (Appendix 17). An additional mailing of 80 surveys yielded an acceptable 70 percent rate of returns. Secondly, although a software program including student, competency, and record-keeping data bases was developed, it was hoped that an additional program could have been developed to access the DECC competencies referenced with the Pennsylvania Scope of Instruction for marketing and Distributive Education in addition to an Apple version. Such programs proved to be so sophisticated to develop that time and funding had expired and also funding to extend the project was not available. Computer programs determined that the Apple version would be difficult to develop because the Apple computer does not have the capacity to run this sophisticated program.

Sample

The sample consisted of all 134 secondary marketing education teachers in the Commonwealth of Pennsylvania listed in the most recent (1986) Pennsylvania Marketing Education Association Directory. Their participation

was arranged through the cooperative efforts of the officers of the Pennsylvania Marketing Education Association and Mr. E. H. Fyler, Marketing Education Supervisor, Commonwealth of Pennsylvania, Department of Education.

Three surveys were returned by schools that discontinued their programs. A total of 90 (70 percent) surveys were returned, however, seven were not usable because of missing data; therefore, a total of 893 (63 percent) surveys were usable for the study.

The mean age of the sample was 41.48 years, 58.9 percent of the population were males and 41.7 percent were females. The majority (68.9 percent) of the teachers had earned Master's Degrees with 25.5 percent possessing Bachelor's Degrees and 5.6 percent had a Doctor's Degree. The comprehensive schools were represented by 46.7 percent of the sample and the Area Vocational Technical Schools (AVTS) accounted for 43.3 percent of the teachers. The mean years of teaching marketing was 14.02 with 13.3 percent conducting a one year program, the majority (55.6 percent) taught in a two year program, and teachers with the one year program accounted for 31.1 percent of the sample.

Most of the schools (40 percent) were located in suburbs (outside city limits) with 23.3 percent representing urban (city) schools and 36.7 percent in rural (farm) communities. Western Pennsylvania represented 55.6 percent of secondary marketing programs, Central Pennsylvania accounted for 20 percent of the programs, and 24.4 percent were located in Eastern Pennsylvania.

The majority (61.1 percent) of the teachers prefer to use the IDECC curriculum materials as supplemental activities with 16.7 percent utilizing it as their core curriculum; 20 percent have chosen not to use it. The IDECC

instructional levels are not followed by 18.9 percent of the teachers while 26.7 percent teach Entry Level (beginning) competencies, 32.2 percent direct their programs toward Career Sustaining (job maintenance) skills, 8.9 percent teach Marketing Supervisor (management) skills, and the Manager-Entrepreneur (ownership), post-secondary, level is not taught by the teachers in the sample.

Procedures

On January 8th, 1988, an advisory committee consisting of four Pennsylvania secondary marketing education teachers, two retail business executives, and two computer experts was established. The committee's function was to support the rationale of the study and validate the survey. The committee will meet during the course of the study, as necessary, to assist with interpretation and analysis of the data.

A draft of the survey was mailed to each committee member on January 8th, requesting initial input for the validation process. The committee then met on January 16th to assist in developing the final draft of the survey.

During the week of January 16th, copies of the survey and cover letter were printed and envelopes with mailing labels were prepared. The survey was mailed to the participants on January 26th along with a request to mail it back by February 5th. In order to minimize a low response rate, each participant was given a newly developed competency-based curriculum guide: the "IDECC Competencies for the Pennsylvania Scope of Instruction". Also, the participants were provided with a postage-paid envelope in which to return the survey.

The participants' school addresses were obtained from the most recent (1986) Pennsylvania Marketing Education Association Directory published by

the Pennsylvania Department of Education. Each participant was assigned a number, based upon his or her name as it appeared in the directory. These numbers were written on all surveys for tracing missing responses. By February 8th, 40 percent (54) of the surveys were returned, therefore, a second mailing was sent on February 12th to the 77 participants who had not responded.

Each survey on the second mailing received the same number in addition to the letter "B" to indicate that it was a part of the second mailing. The participants were also informed that if the second survey was not received by February 26th a telephone call would be made to each not responding.

Nineteen additional surveys were received by February 26th, telephone calls were made to the 58 participants who did not respond to the second request to complete and mail the survey. Two weeks were allotted to receive the surveys from this telephone follow-up, and on March 18th, 17 additional surveys were received for a total of 90 (69 percent). Since the aforementioned follow-up procedures yielded only 36 surveys, it was determined that the remaining participants were not going to respond; therefore, on March 21st, the final data analysis procedures were initiated.

The collection of data to perform the reliability of the study began with another mailing to 10 percent (13) of the sample, randomly selected, upon receipt of each participant's first survey. The surveys were mailed with a cover letter (Appendix 6) and a postage-paid envelope. Each of these surveys were numbered the same as the first but also included the code letter "R" to indicate that the participant was involved with determining the reliability of the study. Only six participants returned this survey and

telephone calls to collect the remaining seven proved unsuccessful; the participants stated that they did not have time to complete a second survey.

Major Findings

Pennsylvania secondary marketing education teachers have from one to thirty years teaching experience with an average of 14.02 years. Most (68.9 percent) of the teachers have Master's Degrees and teach in suburban districts in Western Pennsylvania. The IDECC curriculum is used primarily as supplemental material with instruction directed toward entry level competencies.

Regarding computer philosophy, the sample's mean of 3.7 on a rating scale of one (low) to five (high), indicate that Pennsylvania secondary marketing education teachers believe that computer usage is important. Almost one-fourth (24.4 percent) of the teachers do not have access to computers and 21.1 percent do not have any software. Despite the lack of hardware and software, attempts are being made to provide for individual and small group computer-assisted instruction.

Minor Findings

The mean age of the sample was 41.48 years with 58.9 percent male and 41.1 percent female. Only 5.6 percent of the teachers possessed a Doctor's Degree. Almost half (43.3 percent) of the sample taught at an Area Vocational Technical School (AVTS) with the remaining (46.7 percent) representing comprehensive high schools, and only 20 percent of the schools were located in Central Pennsylvania. None of the teachers are teaching entrepreneurship, the core of our free enterprise system.

Regarding computer usage, the Apple II is the most widely used followed by the Tandy 1000SX and the IBM PC. Additionally, only 10 percent of the teachers have a modem for transmitting and receiving computer data via telephone. One-fifth (20 percent) of the teachers had access to hardware but did not have any instructional software programs. The computers are used an average of 3.8 hours for instruction and 2.1 hours for classroom/program management. This indicates that the teachers are attempting to implement the use of computers despite a lack of equipment and expertise.

Discussion and Conclusions

This study indicates that Pennsylvania secondary marketing education teachers believe it is important to develop curriculum and manage programs with the assistance of computers, however, Stone (1985) maintains that teachers must acquire computer literacy skills. Searle's nation-wide study (1986) support this study, in that teachers have some access to computers but not enough to develop operational skills.

Availability and access to computers, according to the survey, proved to be a problem for Pennsylvania secondary marketing teachers. During visits to local high schools, the teachers revealed that their administrators are not always able to purchase the necessary hardware and software. DuBois and Schubert (1986) support this finding and suggest that schools must readjust their priorities in order to provide for more computers to assist the students in their learning process. Price's Nominal Group Technique (NGT) study (1985) provides a needs assessment model whereby teachers and administrators can get together to solve curriculum problems. The teachers must prepare their students so that they will be able to compete for jobs in business and industry. Heath (1988) concluded that employers will hire

students and graduates with computer skills rather than spend valuable time and money to train a new employee.

At the 1984 National Marketing Education Curriculum Conference in Atlanta, Georgia, Stone conducted a study with the secondary marketing education teachers in attendance, and discovered that not only are computers critical for marketing education, but also, that curriculum development must be research oriented.

Recommendations for Further Investigation

The purpose of this study was to determine if there is any need and support for integrating computers in a secondary competency-based marketing education program. The response of the teacher-participants, advisory committee, and related literature review established and sanctioned the need for additional inquiry. This study has established the foundation for additional research to discover ways of placing more computers in the schools, providing in-service training for teachers, and developing competency-based programs for instruction and program management.

Products Produced and Their Usage

As a result of this project, a menu-driven software program was developed and includes student, competency, and classroom/program management data bases. The name of this program is entitled PENMECCS, Pennsylvania Marketing Education Computer Curriculum System (enclosed with this report).

The results of this project, the product itself, may be used to assist Pennsylvania secondary marketing teachers in more efficiently managing their programs. Additionally, a list of most used software programs was solicited (Appendix 9) from the participants and rated from one (low) to five (high)

according to its usefulness. This list will help teachers to determine the best suited software programs for marketing education.

Dissemination

A demonstration of the program was conducted at the 1988 Pennsylvania Vocational Education Conference and also at the 1988 Pennsylvania Marketing Education Association meeting at which copies of the program were distributed to the participants. Workshops will also be conducted for teachers during the 1988-89 academic year.

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APPENDIX



University of Pittsburgh

SCHOOL OF EDUCATION
Department of Instruction and Learning

MARKETING EDUCATION
COMPUTER CURRICULUM PROJECT
ADVISORY COMMITTEE
AND STAFF

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University of Pittsburgh

December 2, 1987

Mr. Anthony Alviani
1700 Davidson Street
Aliquippa, PA 15001

Dear Mr. Alviani:

Thank you for your willingness to serve as a member of the advisory committee of marketing experts for the Marketing Education Computer Curriculum Project. The members of the panel include the following:

Tony Alviani	New Brighton High School	846-1050
Harry LeWinter	McKeesport A.V.T.S.	664-3698
Irvin Tantlinger	E. Westmoreland A.V.T.S.	539-9788
Joseph Watkoski	Norwin Senior High School	863-6501
Joseph Wolfe	PDE, Western Region	238-9526
E. H. Blyler	PDE, Marketing Advisor	(717)783-8506
Terry Dobos	Sears Roebuck & Company	831-6558
Yvonne Williams	Kaufmann's, Downtown Pgh.	232-2134

Enclosed is a copy of the objectives and procedures of the project for your information. Enclosed also is a draft copy of a cover letter and survey forms for your review. Please make comments and proposed changes in format and content on the survey forms and return them no later than December 11, 1987. We will then make appropriate revisions for content validity of the study and mail the survey form to Pennsylvania Marketing Education Teachers listed in the current State directory with revisions.

Please use the enclosed postage-free envelope to return the survey. Your expert advice is needed and greatly appreciated to insure success of the project. Thank you!

Sincerely yours,

Lee Miles

Lee Miles, Project Coordinator

Frank Palmieri

Frank Palmieri, Project Director

Enclosures

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PART I: Demographics. Please complete ALL of the following

1. 41.48 Your age. (MEAN)
2. 58.9 Male 41.1 Female (MEAN)
3. Your educational level.
(Check highest level achieved):

<u>21.1</u> Bachelor's Degree	}	PERCENT
<u>68.9</u> Master's Degree		
<u>5.6</u> Doctor's Degree		
4. If what type of school do you teach?
(Check one):

<u>46.7</u> Comprehensive School	}	PERCENT
<u>43.3</u> Area Vocational School		
5. 14.02 Number of years teaching experience in marketing? (MEAN) (RANGE 1-30)
6. Does your program operate as a:
(Check one):

<u>10</u> 1 year program	}	PERCENT
<u>55.6</u> 2 year program		
<u>31.1</u> 3 year program		
7. If what area is your school located?
(Check most appropriate one):

<u>21.1</u> Urban	}	PERCENT
<u>40</u> Suburban		
<u>36.7</u> Rural		
8. In what part of the state is your school located? (Check most appropriate one) (PERCENT)
55.6 Western Pennsylvania 20 Central Pennsylvania 24.4 Eastern Pennsylvania
9. Do you use IDEOC as: (Check one) (PERCENT)
16.7 Core curriculum 61.1 Supplemental material 20 Not at all
10. At what IDEOC level do you teach the majority of your students? (PERCENT)
(Check one):

<u>36.7</u> Entry level (pre-vocational)	<u>32.2</u> Career sustaining	<u>1.1</u> Marketing specialist
<u>8.9</u> Marketing supervisor	<u>0</u> Manager-Entrepreneur (post-secondary)	<u>18.9</u> None

PART II: Computer Philosophy in Marketing Education. For ALL of the following questions, use the indicated scale and CIRCLE the appropriate number. **RESPOND IN REFERENCE TO YOUR CLASSROOM or PROGRAM.**

To what degree:	(MEAN)	High Degree				Low Degree
1. Should the marketing educator curriculum include computer usage?	(4.4) ⁵	4	3	2	1	
2. Does your school or district's philosophy include computer usage?	(3.9) ⁵	4	3	2	1	
3. Are computers important for classroom instruction?	(3.8) ⁵	4	3	2	1	
4. Are computers important for classroom/program management?	(3.5) ⁵	4	3	2	1	
5. Would the enclosed IDEOC Competencies For The Pennsylvania Scope Of Instruction be a useful tool for curriculum planning?	(3.7) ⁵	4	3	2	1	
6. Are you proficient using computers?	(3.2) ⁵	4	3	2	1	
7. Are your students proficient using computers?	(2.7) ⁵	4	3	2	1	

PART II: Computer Philosophy in Marketing Education (Continued)

	(MEAN)	Very Useful				Not Useful
B. How useful would computers and developed software be in managing:						
a. Pennsylvania Department of Education Chapters 5 and 6 requirements?	(3.6)	5	4	3	2	1
b. The enclosed IDEOC Competencies For The Pennsylvania Scope Of Instruction?	(3.9)	5	4	3	2	1
c. Student competency records?	(3.9)	5	4	3	2	1
d. Student career planning and statement of objective?	(3.6)	5	4	3	2	1
e. Grading systems?	(4.0)	5	4	3	2	1
f. Student placement/Co-op (job match)?	(3.6)	5	4	3	2	1
g. School store operation?	(4.0)	5	4	3	2	1
h. Local school or district reports?	(3.7)	5	4	3	2	1

PART III: Computer usage in Marketing Education. Complete All questions as indicated.

1. What make, model and quantity of computer do you have in your classroom?

244% none

Example:	Make	Model	Quantity
	Apple	Macintosh Plus	1
a.	_____	_____	_____
b.	_____	_____	_____
c.	_____	_____	_____

2. Do you have a modem for transmitting/receiving computer data via telephone? (Check one)

10% Yes

80% No

3. Approximately how many hours per week do you presently use the computer for:

3.764 Classroom instruction. 2.068 Classroom/program management. .149 Not at all

4. Approximately how many hours per week is your computer used for the following types of instruction?

3.837 Individual. 1.310 Small group. .448 Large group. .139 Not at all

5. List and rate the degree of "User friendliness" of the software you are currently using. 21.1% no software

	Title of software	High Degree				Low Degree
a.	_____	5	4	3	2	1
b.	_____	5	4	3	2	1
c.	_____	5	4	3	2	1

Use the enclosed envelope or mail to: Lee Miles, Marketing Education
University of Pittsburgh
457 Forbes Quad
Pittsburgh, Pennsylvania 15260
(412) 648-7362



University of Pittsburgh

SCHOOL OF EDUCATION
Department of Instruction and Learning

Computer Curriculum Project Survey January 21, 1988

Dear Marketing Instructors,

With this survey, the University is responding to your needs for curriculum development utilizing current computer technology to assist you in the operation of your marketing program. The purpose of this Marketing Education Computer Curriculum Project is to provide you with a competency based computer curriculum system using the Marketing and Distributive Education Scope of Instruction for Pennsylvania referenced with the competencies identified by the Interstate Distributive Education Curriculum Consortium (IDECC).

Enclosed is a copy of the "IDECC Competencies for the Pennsylvania Scope of Instruction" which was developed for our use by the Marketing Education Resource Center in Ohio. You may keep the competency list for your use in appreciation for your time in completing and returning this survey.

The enclosed survey has been validated by a committee of secondary marketing instructors and business people. Your opinion is needed to accomplish the goals of the project. Please complete the survey form and mail by February 1, 1988. Use the enclosed envelope or mail to:

Lee Miles, Marketing Education
University of Pittsburgh
4K57 Forbes Quadrangle
Pittsburgh, PA 15260

If you have questions about the project or the questionnaire, please call me or Lee Miles at 412-648-7362. Thank you for your time in completing and mailing this important survey.

Sincerely yours,

A handwritten signature in cursive script that reads "D. Frank Palmieri".

D. Frank Palmieri
Marketing Education Coordinator

Enclosures

cc: E. H. Blyler

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MARKETING EDUCATION

IDECC COMPETENCIES FOR THE PENNSYLVANIA SCOPE OF INSTRUCTION

ORIENTATION

MDE (No competencies; see "Marketing Handbook for the 80's.")

MARKETING

- o Definition
 - Explain the functions of business, MB:001
 - Explain marketing and its importance, MB:003 (EM LAP 5)
- o Marketing Functions
 - Explain marketing functions and related activities, MB:009 (EM LAP 6)
 - Explain the concept of marketing strategies, MB:011 (EM LAP 13)
- o Channels of Distribution
 - Explain the nature and scope of distribution, DS:001
 - Explain the nature of channels of distribution, MB:013 (EM LAP 18)
- o Marketing Goods and Services
 - Explain marketing and its importance, MB:003 (EM LAP 5)
 - Explain the nature of channels of distribution, MB:013 (EM LAP 18)

CAREERS (No competencies*; see "50-Minute Series.")

CO-OP

- o Time Management
 - Set personal goals, HR:014 (HR LAPs 6,7)
 - Use time management principles, HR:044

DECA (No competencies)

OPERATIONS

SAFETY

- Explain the types of risk, RM:001
- Use safety precautions, RM:010
- Use restaurant traffic patterns, RM:011
- Explain procedures for handling accidents, RM:012

CUSTOMER SERVICES

- Explain the nature and scope of product/service planning, PP:001
- Explain critical aspects of business image, PP:002
- Explain the role of customer services, PP:013
- Explain the nature of delivery systems, PP:014
- Explain banking services, PP:015
- Explain restaurant services, PP:016

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OPERATIONS (cont'd)

PHYSICAL DISTRIBUTION

o Receiving

- Explain the receiving process, DS:004
- Explain stock-handling techniques used in receiving deliveries, DS:005
- Determine processing priorities, DS:006
- Check incoming stock, DS:007
- Reconcile shipping/receiving discrepancies, DS:008
- Process returned/damaged product, DS:009
- Process returns to vendors, DS:010
- Price mark stock--stamps, tags, tickets, etc., DS:011
- Make and record price changes, DS:012
- Explain storing considerations, DS:013
- Select appropriate storage equipment, DS:014
- Route stock to selling floor, DS:015
- Maintain pump island supplies, DS:016
- Maintain supplies, condiments, etc., DS:017
- Transfer stock--to/from branches, etc., DS:018

o Inventory Control

- Maintain stock levels, DS:023
- Complete stock counts, DS:025
- Organize stock counts, DS:024
- Explain the nature of inventory control systems, DS:019
- Explain types of unit inventory control systems, DS:022
- Calculate inventory shrinkage, DS:026
- Maintain unit inventory control systems, DS:027
- Explain the nature of dollar inventory control systems, DS:020
- Maintain dollar inventory control systems, DS:021
- Complete housekeeping responsibilities, OP:077

PERSONNEL AND TRAINING

- Schedule employees, MN:044
- Maintain personnel records, MN:033
- Develop job classifications, MN:043
- Establish personnel policies, MN:039
- Orient new employees, MN:078
- Exp' the nature of employee training/human resource development, MN:019
- Evaluate employees, MN:021
- Explain the nature of wage and benefit programs, MN:027

SECURITY

o Interior

- Explain routine security precautions, RM:003
- Explain procedures for preventing internal theft, RM:007

o Exterior

- Explain routine security precautions, RM:003
- Explain procedures in robbery situation, RM:005
- Explain shoplifting policies/procedures, RM:006

o Equipment

- Use fire and safety equipment, RM:008

(Continued)

BASIC SKILLS

HUMAN RELATIONS

o Characteristics of Personality

- Develop personality traits important to business, HR:286 (HR LAP 10)
- Maintain appropriate personal appearance, HR:263 (HR LAP 13)
- Maintain positive attitude, HR:274 (HR LAP 11)
- Demonstrate interest and enthusiasm, HR:303 (HR LAP 20)
- Demonstrate responsible behavior, HR:022 (HR LAP 5)
- Demonstrate honesty and integrity, HR:312 (HR LAP 19)
- Demonstrate orderly and systematic behavior, HR:267 (HR LAP 4)
- Demonstrate initiative, HR:317 (HR LAP 14)
- Demonstrate self-control, HR:294 (HR LAP 18)
- Demonstrate appropriate creativity, HR:296 (HR LAP 15)
- Use feedback for personal growth, HR:295 (HR LAP 3)
- Adjust to change, HR:301 (HR LAP 8)

o Respect for Others

- Foster positive working relationships, HR:269 (HR LAPs 1,9)
- Show empathy for others, HR:028 (HR LAP 17)
- Use appropriate assertiveness, HR:021 (HR LAP 16)

o Characteristics of Employees

- Develop personality traits important to business, HR:286 (HR LAP 10)
- Maintain appropriate personal appearance, HR:263 (HR LAP 13)
- Demonstrate responsible behavior, HR:022 (HR LAP 5)
- Demonstrate honesty and integrity, HR:312 (HR LAP 19)
- Use time management principles, HR:044

o Understanding Co-Workers

- Foster positive working relationships, HR:269 (HR LAPs 1,9)

o Customer Contact

- Explain the nature of positive customer/client relations, HR:035
- Explain the concept of gratuities, HR:039
- Handle customer inquiries, HR:004
- Direct customer/client to other locations, HR:031
- Handle difficult customers, HR:045 (HR LAP 21)
- Interpret business policies to customers/clients, HR:030
- Handle customer/client complaints, HR:046 (SE LAP 106)

o Self-Control

- Demonstrate self-control, HR:294 (HR LAP 18)

o Personality Types (See "Characteristics of Personality," above.)

o Personality Development

- Explain the concept of self-understanding, HR:302 (HR LAP 2)
- Explain the concept of self-esteem, HR:023 (HR LAP 12)
- Use feedback for personal growth, HR:295 (HR LAP 3)
- Adjust to change, HR:301 (HR LAP 8)
- Set personal goals, HR:014 (HR LAPs 6,7)
- Use time management principles, HR:044

COMMUNICATIONS

o Types of Communications

- Explain the nature of effective communications, CO:015

(Continued)

BASIC SKILLS (cont'd)

o Written Communications

- Use proper grammar and vocabulary, CO:004
- Explain the nature of written communications, CO:016
- Write business letters, CO:133
- Prepare simple written reports, CO:094
- Prepare complex written reports, CO:009

o Oral Communications

- Use proper grammar and vocabulary, CO:004
- Explain the nature of effective verbal communications, CO:147
- Address people properly, CO:005
- Use telephone in businesslike manner, CO:114

o Listening/Following Skills

- Listen to and follow directions, CO:119

RELATED MATHEMATICS

o Review of Fundamentals

- Solve addition problems, MA:097 (MA LAP 41)
- Solve subtraction problems, MA:098 (MA LAP 41)
- Solve multiplication problems, MA:099 (MA LAP 42)
- Solve division problems, MA:100 (MA LAP 42)
- Solve mathematical problems involving fractions, MA:101 (MA LAP 43)
- Solve mathematical problems involving percentages, MA:377 (MA LAP 43)
- Read charts and graphs, MA:113
- Solve first-degree algebraic equations, MA:103 (MA LAP 44)

o Sales Transactions

- Calculate tax, discounts, and miscellaneous charges for purchases, MA:089
- Complete sales checks, MA:090 (MA LAP 48)
- Complete charge sale transactions, MA:092 (MA LAP 49)
- Process returns, refunds, and exchanges, MA:094 (MA LAP 45)
- Process layaway/COD sales, MA:093 (MA LAP 46)
- Record and report sales tax, MA:108

o Calculating Earnings

- Explain the nature of wage and benefit programs, MN:027
- Develop employee incentive program, MN:012

c Handling Money

- Make change, MA:386
- Inspect for counterfeit currency, MA:031
- Prepare cash drawers/banks, MA:388 (MA LAP 47)
- Maintain appropriate cash level, MA:047
- Verify/Record cash, MA:118
- Accept customer/client checks, MA:091
- Complete bank deposits/records, MA:121

o Inventory Math

- Calculate inventory shrinkage, DS:026
- Maintain unit inventory control systems, DS:027
- Explain the nature of dollar inventory control systems, DS:020
- Maintain dollar inventory control systems, DS:021
- Calculate merchandising-related discounts, PU:013
- Determine final cost of product to company, PU:014

(Continued)

BASIC SKILLS (cont'd)

- o Cash Register/Calculator Operation
 - Operate calculator, OP:133
 - Operate register/P.O.S. terminal, MA:095
 - Correct register/terminal errors, MA:354
 - Close out register/terminal, MA:361
- o Pricing
 - Explain the nature and scope of pricing, PI:001
 - Explain factors affecting selling price, PI:002
 - Explain the psychological effects of pricing, PI:005
 - Calculate break-even points, PI:006
 - Explain the nature of company pricing policies, PI:004
 - Explain legal considerations of pricing, PI:003
 - Establish selling price--management, PI:007
 - Adjust prices, PI:008
- o Recordkeeping
 - Explain the concept of accounting/finance, MB:005
 - Explain the concept of administration, MB:006
 - Explain types of records needed for business operations, MN:065
- o Profit/Loss Statements
 - Calculate net sales, MA:349
 - Interpret profit and loss statements, MA:352

DECISION-MAKING (No competencies)

MANAGEMENT

BUSINESS ORGANIZATION

- Explain the concept of private enterprise and business ownership, EC:009 (EM LAP 15)
- Explain the types of ownership, MB:007
- Develop a personnel organizational plan, MN:042
- Develop job classifications, MN:043
- Plan and organize work, MN:723

SUPERVISION

- o Characteristics of Supervision
 - Explain the concept of management, MB:002
- o Decision-making Process
 - Develop company objectives--for mgt. unit, MN:074
 - Explain external planning considerations, MN:035
 - Establish operating policies, MN:038
- o Personnel Motivation
 - Explain ways to develop a positive working environment, MN:026
 - Explain ways to build employee morale, MN:025
 - Explain the concept of staff motivation, MN:029
 - Explain the relationship of communications with employee motivation, MN:031
 - Explain the concept of employee participation in policymaking, MN:041
 - Explain the role of leadership in business, MN:030
 - Handle employee complaints and grievances, MN:034

(Continued)

MANAGEMENT (cont'd)

o Productivity

Explain the concept of productivity, EC:013

Explain the concept of division/specialization of labor, EC:014 (EM LAP 21)

Explain the concept of organized labor and business, EC:015 (EM LAPs 22,23)

o Quality Control

Explain applicable grades and standards, PP:019

Explain warranties and guarantees, PP:020

Explain consumer protection provisions of appropriate agencies, PP:017

Explain critical aspects of business image, PP:002

Explain environmental factors conducive to customer/client satisfaction, PP:010

o Scheduling

Plan and organize work, MN:723

Schedule employees, MN:044

Determine hiring needs, MN:734

FINANCING

o Financial Institutions (No competencies)

o Capital Requirement (No competencies)

o Cash Flow (No competencies)

o Qualifying for Credit

Explain the purpose and importance of obtaining credit--business, FI:023

o Operating Expenses

Explain the nature of overhead/operating costs, MN:081

Explain employee role in expense control, MN:016

Develop expense-control plans, MN:059

Explain the nature of operating budgets, MN:083

Develop sales-support budget, MN:061

Develop company-wide budget, MN:653

Use budgets to control operations, MN:063

Analyze operating results in relation to budget/industry, MN:069

o Profit/Risk

Explain the types of risk, RM:001

Explain the nature of risk management, RM:002

Exp' the concept of private enterprise and business ownership, EC:009 (EM LAP 15)

Explain the concept of risk, EC:011 (EM LAP 8)

CREDIT

o Advantages/Disadvantages of Credit

Explain the purposes and importance of credit, FI:002

o Types of Credit Accounts

Interpret/Explain credit policies, FI:005

Explain bank credit cards--such as MasterCard or VISA, FI:006

Explain installment loans, FI:007

Explain mortgage loans, FI:008

(Continued)

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MANAGEMENT (cont'd)

- o Credit Application Evaluation
 - Explain the factors affecting extension of credit, FI:017
 - Explain the use of credit bureaus, FI:018
 - Explain legal considerations for granting credit, FI:019
 - Make credit decisions, FI:020
 - Establish credit policies, FI:021
 - Develop credit application form, FI:022
 - Facilitate credit applications, FI:003
 - Facilitate business credit applications, FI:004
- o Credit Approval Procedures
 - Complete charge sale transactions, MA:092 (MA LAP 49)
- o Collection Procedures
 - Explain collection considerations, FI:010
 - Explain credit statements, FI:011
 - Process customer credit invoices/statements, FI:012
 - Analyze customer accounts, FI:013
 - Collect past-due accounts, FI:014
 - Arrange extended repayment plan, FI:015
 - Close credit accounts, FI:016
- o Consumer Credit Laws
 - Explain legal considerations for granting credit, FI:019

ECONOMICS

ECONOMIC FUNDAMENTALS

- Exp' the concept of economics and economic activities, EC:001 (EM LAP 1)
- Explain the types of systems, EC:007
- Explain the concept of economic resources, EC:003 (EM LAP 4)
- Explain the concept of economic goods and services, EC:002 (EM LAP 2)
- Explain the nature of international trade, EC:016 (EM LAP 24)

NATIONAL ECONOMY

- Exp' the concept of private enterprise and business ownership, EC:009 (EM LAP 15)
- Explain the relationship of business and society, MB:008
- Explain the relationship of government and business, EC:008 (EM LAP 16)
- Explain the concept of Gross National Product, EC:017 (EM LAP 19)

MARKETING FUNDAMENTALS

- Explain marketing functions and related activities, MB:009 (EM LAP 6)
- Explain the nature of channels of distribution, MB:013 (EM LAP 18)
- Explain the concept of market and market identification, MB:012 (EM LAP 12)
- Explain the concept of marketing strategies, MB:011 (EM LAP 13)
- Explain marketing and its importance, MB:003 (EM LAP 5)
- Explain the concept of business cycles, EC:018 (EM LAP 20)
- Explain the concept of supply and demand, EC:005 (EM LAP 10)
- Explain the concept of competition, EC:012 (EM LAP 11)

ORGANIZED LABOR

- Explain the concept of division/specialization of labor, EC:014 (EM LAP 21)
- Explain the concept of organized labor and business, EC:015 (EM LAPs 22,23)

(Continued)

ENTREPRENEURSHIP

SMALL BUSINESS

- Exp' the concept of private enterprise and business ownership, EC:009 (EM LAP 15)
- Explain the types of ownership, MB:007
- Explain the concept of competition, EC:012 (EM LAP 11)
- Explain the functions of business, MB:001
- Explain external planning considerations, MN:035
- Explain legal considerations for company operation, MN:036

RESEARCH/PLANNING

- o Target Market
 - Explain the concept of market and market identification, MB:012 (EM LAP 12)
 - Interpret market demand, IM:005
 - Determine sales potential, IM:007
- o Business Location
 - Explain business location considerations, PP:011
- o Marketing Strategy
 - Explain the concept of marketing strategies, MB:011 (EM LAP 13)
 - Explain marketing functions and related activities, MB:009 (EM LAP 6)
- o Evaluating Marketing Research
 - Explain the nature and scope of marketing-information management, IM:001
 - Explain the nature of demand analysis, IM:002
 - Explain the nature of sales forecasting, IM:003
 - Interpret trends in sales volume, IM:004
 - Interpret market demand, IM:005
 - Determine sales potential, IM:007
 - Interpret factors affecting market share, IM:008
 - Forecast sales, IM:009
- o Evaluating Operation
 - Analyze operating results in relation to budget/industry, MN:069
 - Explain types of records needed for business operations, MN:065
 - Evaluate media/advertising effectiveness, PR:013
- o Develop Business Plan
 - Explain the nature and scope of distribution, DS:001
 - Explain the nature and scope of finance, FI:001
 - Explain the nature and importance of credit, FI:002
 - Explain the nature and scope of marketing-information management, IM:001
 - Forecast sales, IM:009
 - Explain the nature and scope of pricing, PI:001
 - Establish selling price--management, PI:007
 - Explain the nature and scope of product/service planning, PP:001
 - Explain the role of promotion, PR:001
 - Explain the nature of a promotional program, PR:073
 - Determine promotional policy, PR:069
 - Explain the nature and scope of purchasing, PU:001
 - Prepare buying plan, PU:010
 - Explain the nature of risk management, RM:002
 - Explain company selling policies, SE:932
 - Develop company objectives--for management unit, MN:074
 - Explain legal considerations for company operation, MN:036
 - Establish operating policies, MN:038

(Continued)

ENTREPRENEURSHIP (cont'd)

REGULATIONS

- Explain the relationship of business and society, MB:008 (EM LAP 17)
- Explain the relationship of government and business, EC:008 (EM LAP 16)
- Explain legal considerations for company operation, MN:036
- Explain consumer protection provisions of appropriate agencies, PP:017
- Explain restaurant health and sanitation laws, PP:018
- Handle customer/client complaints, HR:046 (SE LAP 106)

FINANCING

- Calculate net sales, MA:349
- Interpret profit and loss statements, MA:352
- Explain the nature and scope of finance, FI:001
- Explain the purpose and importance of obtaining credit-business, FI:023
- Explain types of records needed for business operations, MN:065

EMPLOYMENT PREPARATION

JOB ACQUISITION (Also, see "50-Minute Series.")

- Write business letters, CO:133
- Explain the nature of effective communications, CO:015
- Use proper grammar and vocabulary, CO:004
- Explain the nature of effective verbal communications, CO:147
- Address people properly, CO:005
- Use telephone in businesslike manner, CO:114

JOB RETENTION

- o Positive Attitude
 - Develop personality traits important to business, HR:286
 - Maintain positive attitude, HR:274 (HR LAP 11)
 - Demonstrate interest and enthusiasm, HR:303 (HR LAP 20)
- o Updated Skills and Knowledge
 - Explain the use of trade journals/periodicals, CD:001
 - Explain the role of professional/trade organizations, CD:002
- o Employer/Employee Communication
 - Listen to and follow directions, CO:119
 - Explain the nature of staff communications, CO:014
 - Explain the use of inter-departmental/company communications, CO:011
 - Explain the use of employee publications, CO:013
- o Employee Responsibilities (No competencies)

LABOR REGULATIONS

- Explain the concept of organized labor and business, EC:015 (EM LAPs 22,23)
- Use safety precautions, RM:010
- Explain procedures for handling accidents, RM:012

WORK ETHICS

- Demonstrate responsible behavior, HR:022 (HR LAP 5)
- Demonstrate honesty and integrity, HR:312 (HR LAP 19)
- Demonstrate orderly and systematic behavior, HR:267 (HR LAP 4)
- Demonstrate initiative, HR:317 (HR LAP 14)
- Foster positive working relationships, HR:269 (HR LAPs 1,9)
- Show empathy for others, HR:028 (HR LAP 17)

COOPERATIVE WORK EXPERIENCE

JOB ANALYSIS (Also, see "50-Minute Series.")

o Characteristics of a Good Employee

- Develop personality traits important to business, HR:286 (HR LAP 10)
- Maintain appropriate personal appearance, HR:263 (HR LAP 13)
- Maintain positive attitude, HR:274 (HR LAP 11)
- Demonstrate interest and enthusiasm, HR:303 (HR LAP 20)
- Demonstrate responsible behavior, HR:022 (HR LAP 5)
- Demonstrate honesty and integrity, HR:312 (HR LAP 19)
- Demonstrate orderly and systematic behavior, HR:267 (HR LAP 4)
- Demonstrate initiative, HR:317 (HR LAP 14)
- Demonstrate self-control, HR:294 (HR LAP 18)
- Demonstrate appropriate creativity, HR:296 (HR LAP 15)

o Getting Along With Co-Workers/Customers

- Foster positive working relationships, HR:269 (HR LAPs 1,9)
- Explain the nature of positive customer/client relations, HR:035
- Explain management's role in customer relations, HR:038
- Show empathy for others, HR:028 (HR LAP 13)
- Use appropriate assertiveness, HR:021 (HR LAP 16)
- Handle difficult customers, HR:045 (HR LAP 21)

o Job Descriptions

- Develop job classifications, MN:043

o Work Rules (No competencies)

o Organizational Structure

- Develop a personnel organizational plan, MN:042

o Study Habits (No competencies; see "50-Minute Series.")

o Safety

- Use safety precautions, RM:010
- Explain procedures for handling accidents, RM:012

EVALUATION (No competencies)

BUSINESS/EDUCATION RELATIONS (No competencies)

MERCHANDISING

SELLING

o Types

- Explain the nature and scope of distribution, DS:001
- Explain the nature of channels of distribution, MB:013 (EM LAP 18)
- Explain the purpose and importance of selling, SE:017

o Product Knowledge

- Obtain product information from sources on/with the item, SE:011 (SE LAP 104)
- Use company promotional material for selling information, SE:012
- Explain services and terms being advertised by competitors, SE:052
- Obtain product information from appropriate individuals, SE:010
- Obtain product information from appropriate individuals--management, SE:045
- Explain the use of brand names in selling, SE:019

(Continued)

MERCHANDISING (cont'd)

o Buying Motives

- Address needs of individual personalities, SE:810 (SE LAP 112)
- Use buying motives as basis of sales presentation, SE:883 (SE LAPs 102,109)
- Facilitate customer buying decisions, SE:811 (SE LAP 108)
- Explain key factors in building a clientele, SE:828

o Consumer Behavior

- Address needs of individual personalities, SE:810 (SE LAP 112)
- Use buying motives as basis of sales presentation, SE:883 (SE LAPs 102,109)
- Explain the nature and scope of marketing-information management, IM:001
- Explain the nature of demand analysis, IM:002
- Interpret market demand, IM:005

o Customer Wants/Needs

- Explain the purpose and importance of selling, SE:017
- Address needs of individual personalities, SE:810 (SE LAP 112)
- Use buying motives as basis of sales presentation, SE:883 (SE LAPs 102,109)
- Question/Probe for information, SE:024
- Question/Probe for information--advanced, SE:042
- Use feature/benefit selling, SE:873 (SE LAP 113)

o Steps in a Sale

- Explain the selling process, SE:048
- Open the sales presentation, SE:869 (SE LAP 101)
- Question/Probe for information, SE:024
- Question/Probe for information--advanced, SE:042
- Suggest product substitutions, SE:871 (SE LAP 111)
- Demonstrate product, SE:893 (SE LAP 103)
- Use feature-benefit selling, SE:873 (SE LAP 113)
- Explain features/benefits of menu items, SE:036
- Handle customer/client objections, SE:874 (SE LAP 100)
- Close the sale, SE:895 (SE LAP 107)
- Use suggestion selling, SE:875 (SE LAP 110)
- Sell product/service, SE:046
- Explain follow-up techniques, SE:057
- Maintain/Use customer/prospect list, SE:001

BUYING

o Merchandise Plan

- Explain the nature of merchandising plans--budgets, PU:019
- Plan stock, PU:020
- Plan reductions, PU:021
- Plan purchases, PU:022
- Plan gross margin, PU:023
- Prepare/Review merchandising plans--budgets, PU:025

o Market Research

- Explain the nature and scope of marketing-information management, IM:001
- Explain the nature of demand analysis, IM:002
- Explain the nature of sales forecasting, IM:003
- Interpret trends in sales volume, IM:004
- Interpret market demand, IM:005
- Determine sales potential, IM:007
- Interpret factors affecting market share, IM:008
- Forecast sales, IM:009

MERCHANDISING (cont'd)

o Merchandise Selection

- Explain the nature and scope of purchasing, PU:001
- Explain company buying/purchasing policies, PU:002
- Explain the nature of buying process, PU:003
- Determine what to buy, PU:004
- Determine quantities to buy, PU:005
- Determine when to buy, PU:006
- Prepare buying plan, PU:010
- Plan buying trip, PU:011
- Analyze/Select appropriate products, PU:012
- Calculate merchandising-related discounts, PU:013
- Determine final cost of product to company, PU:014
- Order merchandise, PU:015
- Schedule regular product deliveries, PU:016
- Authorize payments for merchandise, PU:017
- Analyze proposed purchases, PU:018

o Vendor Selection

- Explain the nature of buyer reputation/vendor relationships, PU:007
- Choose vendors/resources, PU:008

o Pricing

- Explain the nature and scope of pricing, PI:001
- Explain factors affecting selling price, PI:002
- Explain the psychological effects of pricing, PI:005
- Calculate break-even points, PI:006
- Explain the nature of company pricing policies, PI:004
- Explain legal considerations of pricing, PI:003
- Establish selling price--management, PI:007
- Adjust prices, PI:008

SALES PROMOTION: ADVERTISING

o Types

- Explain the role of promotion, PR:001
- Explain the types of promotion, PR:002
- Explain the concept of promotional mix, PR:003 (EM LAP 14)

o Advertising Components

- Explain the concept of promotional mix, PR:003 (EM LAP 14)
- Explain the use of brands and trademarks, PR:004
- Explain the use of slogans, PR:005
- Explain parts of a print advertisement, PR:014
- Develop advertising headlines, PR:015
- Prepare (print) advertising copy, PR:016
- Select advertising illustrations, PR:017
- Develop advertising layouts, PR:018
- Explain the use of color in advertising, PR:019
- Select type style for print advertisements, PR:020
- Check advertising proofs, PR:021
- Explain the capabilities of common printing techniques, PR:022

o Advertising Budget

- Prepare advertising budget, PR:070
- Seek cooperative advertising/promotional materials, PR:071

(Continued)

MERCHANDISING (cont'd)

o Media

- Explain the types of media, PR:007
- Explain types of media used by competitors, PR:008
- Calculate media costs, PR:009
- Select promotional media, PR:010
- Contract for newspaper advertising, PR:011
- Contract for broadcast advertising, PR:012
- Evaluate media/advertising effectiveness, PR:013

o Advertising Plan

- Explain the nature of a promotional program, PR:073
- Select merchandise for promotion, PR:074
- Use past advertisements for promotional planning, PR:075
- Coordinate promotional activities, PR:076
- Plan/Schedule displays/themes with management, PR:077
- Coordinate promotional and selling activities, PR:078
- Develop a comprehensive, company-wide promotional program, PR:079
- Use advertising agency, PR:080
- Explain the use of advertising agencies, PR:081
- Determine promotional policy, PR:069

SALES PROMOTION: VISUAL MERCHANDISING

o Types/Classifications

- Explain the use of visual merchandising, PR:023
- Explain the use of visual merchandising to create image, PR:024
- Exp' the relationship of merchandising and visual merchandising--display, PR:025

o Display Concepts

- Explain types of display arrangements, PR:026
- Exp' display techniques that encourage identif'n with client, PR:027
- Develop color scheme, PR:029
- Construct display backgrounds, PR:030
- Select and use display fixtures, PR:031
- Explain the use of vendor support/display aids, PR:032
- Explain supply and fixture purchase considerations, PR:033
- Explain sign printing/production procedures, PR:034
- Letter display signs, PR:035
- Design display signs, PR:036
- Design preliminary display sets, PR:037
- Design special-purpose displays, PR:038
- Explain assembly considerations, PR:040
- Prepare merchandise for display, PR:041
- Arrange display products, PR:042
- Dress and assemble mannequins, PR:043
- Adjust/Install display lighting, PR:044
- Maintain display workshop area, PR:045
- Explain recordkeeping procedures for display storage, PR:046
- Assemble displays, PR:047
- Inspect/Approve displays, PR:049
- Maintain display records, PR:050
- Explain the use of display evaluation, PR:051
- Maintain displays, PR:052
- Care for live plants, PR:053
- Dismantle displays, PR:054

(Continued)

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MERCHANDISING (cont'd)

o Display Plan

- Explain the nature of a promotional program, PR:073
- Select merchandise for promotion, PR:074
- Use past advertisements for promotional planning, PR:075
- Coordinate promotional activities, PR:076
- Plan/Schedule displays/themes with management, PR:077
- Coordinate promotional and selling activities, PR:078
- Develop a comprehensive, company-wide promotional program, PR:079

o Display Budget

- Prepare advertising budget, PR:070
- Seek cooperative advertising/promotional materials, PR:071

o Materials and Tools

- Select and use display fixtures, PR:031
- Explain the use of vendor support/display aids, PR:032
- Explain supply and fixture purchase considerations, PR:033
- Explain sign printing/production procedures, PR:034
- Dress and assemble mannequins, PR:043
- Adjust/Install display lighting, PR:044
- Care for live plants, PR:053

ELECTRONIC MARKETING*

- Explain the utilization of computers in marketing, OP:126

*Most of these concepts are integrated into competencies and LAPs as appropriate. For example, "purchasing" competencies will discuss computer usage in detail. Similar approaches in "marketing-information management" and throughout system.

DECA

LEADERSHIP (No competencies; see "Business Quiz" software for "parliamentary procedure.")

COMPETITIVE EVENTS (No competencies)

COMMUNITY INVOLVEMENT

o Public Relations

- Promote through publicity/public relations, PR:055
- Explain the nature of company participation in community activities, PR:056
- Write (publicity, news release, PR:057



University of Pittsburgh

SCHOOL OF EDUCATION
Department of Instruction and Learning

February 16, 1988

Dear Mr. [redacted] Teacher,

Thank you for completing the Marketing Education Computer Curriculum Project Survey mailed to you recently.

Concerning statistical methods for research, determining reliability of a survey requires 10% of the sample to complete the instrument a second time. You have been selected, using a random number table, to participate in this process.

Your continued support and cooperation is most appreciated.

Sincerely,

Lee Miles
Project Coordinator

LM/mm
Enclosures

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University of Pittsburgh

TO Pennsylvania Secondary Marketing Teachers
FROM Lee Miles, Marketing Education
DATE February 8, 1983
SUBJECT Computer Curriculum Project Survey

This memo is just a reminder that your survey has not been received, however, if you have mailed it please disregard this memo.

Please keep in mind that Pennsylvania's marketing teachers will benefit from this research. Results will be disseminated before the end of the 1987-1988 school year.

This reminder will be followed by a phone call if your survey is not received by February 22, 1988. For your convenience, another survey is enclosed along with a postage paid envelope for mailing.

If you have any questions please feel free to call.

Thank you.

Lee Miles, Marketing Education
University of Pittsburgh
4K57 Forbes Quadrangle
Pittsburgh, Pennsylvania 15260

(412) 648-7362

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University of Pittsburgh

TO Marketing Education Computer Curriculum Project Advisory Committee
FROM Lee Miles, Project Coordinator
DATE January 5, 1988
SUBJECT Committee Meeting

Our first meeting, as a group, will be held:

Where: University of Pittsburgh
4551 Forbes Quadrangle

When: Saturday, January 16, 1988

Time: 9:00 AM - 12:00 NOON

The purpose of the meeting is to discuss the project survey before mailing it to the teachers.

Free parking has been arranged in the garage below Forbes Quadrangle. Please bring the enclosed parking permit with you. You MUST have this permit in order to park at this location.

If you have any questions please call me or Dr. Palmieri at 648-7362.

Thank you for your interest and cooperation.



University of Pittsburgh

MARKETING EDUCATION COMPUTER CURRICULUM PROJECT

ADVISORY COMMITTEE MEETING

January 16, 1988
9:00 AM - 12:00 Noon

University of Pittsburgh
4M51 Forbes Quadrangle

AGENDA

- Registration/Continental Breakfast.....Lee Miles
- Introduction of Committee Members.....Lee Miles
- Objectives and Procedures of Project.....Dr. Palmieri
- Purpose of Meeting.....Dr. Palmieri
- Discussion/Approval of Evaluation Instrument.....Dr. Palmieri
Lee Miles
- Break
- Discussion: "What can be done in schools with the use
of computers and software development?"....Dr. John Schell
Carl Hoburg
- Discussion: In-school computer development and
scheduling of schools.....Lee Miles
- Summary/Questions
- Schedule Next Meeting
- Adjournment



University of Pittsburgh

TO Marketing Education Computer Curriculum Project Advisory Committee
FROM ^{KW} Lee Miles, Project Coordinator
DATE February 5, 1988
SUBJECT Advisory Committee Meeting #2

Our next meeting will be held:

When: February 27, 1988 2:30 PM
Where: 4M51 Forbes Quadrangle,
University of Pittsburgh

Tentative Agenda:

Correlation of instrument variables.
Discussion of results to date.
On site testing, planning and implementation.

Please call at 643-7362 Only to Cancel.

A parking permit is enclosed for free parking in the garage under the Forbes Quadrangle building.



University of Pittsburgh

SCHOOL OF EDUCATION
Department of Instruction and Learning

MARKETING EDUCATION COMPUTER CURRICULUM PROJECT

ADVISORY COMMITTEE MEETING

February 27, 1988
2:30 PM

University of Pittsburgh
4M51 Forbes Quadrangle

AGENDA

Introduction

Survey Accounting

Report of School Visits
Hardware in Place
Use of Hardware
Use of Software

Preliminary Results/Trends
Procedures
Age/Sex Variable
Instructional Levels

Programming
IDECC Competencies-Scope of Instruction

Summary
Final Project Format
This Year: Testing
Next Year: Development and Follow Up

Schedule Next Meeting/Adjournment

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University of Pittsburgh

TO Marketing Education Computer Curriculum
Project Advisory Committee
FROM *LM* Lee Miles, Project Coordinator
DATE March 29, 1988
SUBJECT April Advisory Committee Meeting

Just a reminder that our next meeting will be held:

When: April 9, 1988

Where: The University of Pittsburgh
4M51 Forbes Quadrangle

Time: 9:00 a.m. - 12:00 noon

Agenda: Report and Discussion of Survey Data
Future Related Projects

Enclosed is a parking permit to be used in the garage beneath
Forbes Quadrangle.

Continental breakfast will be served.

Please call me or Dr. Palmieri only to cancel at 648-7362.
Thank you.



University of Pittsburgh

MARKETING EDUCATION
COMPUTER CURRICULUM PROJECT

ADVISORY COMMITTEE MEETING

April 9, 1988
9:00 AM - 12:00 NOON

University of Pittsburgh
4M.51 Forbes Quadrangle

AGENDA

Continental Breakfast

Progress Report

Project Statistics

Demonstration
Computer Program To Date

Discussion/Summary

Future Research in Marketing Education

Schedule Next Meeting

Adjourn



University of Pittsburgh
SCHOOL OF EDUCATION
Department of Instruction and Learning

MARKETING EDUCATION
COMPUTER CURRICULUM PROJECT

ADVISORY COMMITTEE
MEETING

May 21, 1988
9:00 AM - 12:00 NOON

University of Pittsburgh
4M51 Forbes Quadrangle

AGENDA

Continental Breakfast

Welcome

Project Update

Curriculum/Software Development

- Introduction & Description
- Features(Including sample screens)
- Set Up
- Competency Data Base
- Student Data Base
- Reports

Field Test Computer Software

Summary & Projected Outcomes

Next Meeting

Adjournment



University of Pittsburgh

SCHOOL OF EDUCATION
Department of Instruction and Learning

TO: Marketing Education Computer Curriculum
Project Advisory Committee

FROM: Lee Miles, Project Coordinator

DATE: May 16, 1988

SUBJECT: May Advisory Committee Meeting

Just a reminder that our next meeting will be held:

WHEN: Saturday, May 21, 1988

WHERE: The University of Pittsburgh
4M51 Forbes Quadrangle

TIME: 9:00 a.m. - 12:00 Noon

A G E N D A : DEVELOPMENT OF PROJECT TO DATE
FIELD TESTING

Enclosed is a Parking Permit to be used in the garage
under Forbes Quadrangle.

Continental Breakfast will be served.

Please call me or Dr. Palmieri only to cancel - 648-7362.

REPORT AND EVALUATION OF COMPUTER SOFTWARE

Title of Software	(Mean)	High Degree				Low Degree
		5	4	3	2	1
Certificate Maker	(Mean)	5.00				
Resume Writer		5.00				
PFS Write (Word Processing)		5.00				
Print Shop		4.75				
Typing Tutor		4.66				
Peanut Butter Factory		4.50				
Resumes Made Easy		4.50				
Apple Works		4.43				
Jeans Factory		4.20				
Enterprise Sandwich Shop		3.83				
Computerized Inventory Procedure		3.80				
Gadgetronics		3.67				
Lotus 1, 2, 3		3.50				
Inventory Control and Budgeting		3.00				
Word Star Pro		2.34				
Word Perfect		2.30				

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